BASF Aktiengesellschaft

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Dividing wall column for fractionation of a multicomponent mixture

Abstract

A dividing wall column comprises the following segments:

- a) an upper column region (1),
- b) an enrichment section (2) of the feed section,
- c) a stripping section (4) of the feed section,
- d) an upper part (3) of the offtake section,
- e) a lower part (5) of the offtake section,
- f) an intermediate region (9) of the feed section,
- g) an intermediate region (10) of the offtake section and
- h) a lower column region (6).

For the purposes of the present invention, it is essential that the dividing wall (7) is located vertically between the segments b) (2) and d) (3) and between the segments c) (4) and e) (5), the segments b) (2), d) (3), c) (4) and e) (5) have separation-active internals and the cross-sectional area A_b of the segment b) (2) is at least 10% smaller than the cross-sectional area A_c of the segment d) (3), and the cross-sectional area A_c of the segment c) (4) is at least 10% greater than the cross-sectional area A_c of segment e) (5).